

Notice of Allowability

Application No.

10/706,115

Examiner

Steven J. Fulk

Applicant(s)

LOOK, KEVIN T.

Art Unit

2891

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 04 November 05.
2. ☒ The allowed claim(s) is/are 1-17 and 27-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


BRADLEY K. SMITH
PRIMARY EXAMINER

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed November 4, 2005 has been entered.

Allowable Subject Matter

2. Claims 1-17 and 27-30 are allowed.
3. The following is an examiner's statement of reasons for allowance: a search of the relevant art did not find the silicide gate of a non-volatile memory cell exhibiting agglomeration to program the cell, as recited in claims 1 and 27.

Mei et al. '079 discloses a transistor memory cell that is programmed by applying a voltage to the gate and agglomerating particles in the gate dielectric, but not agglomerating the gate itself.

Kothandaraman '458 discloses a non-volatile transistor memory that is programmed by running a current through the gate, but the result is a shorted channel as opposed to an open gate.

McElroy '836 discloses a read-only memory that is fabricated by printing or not printing gate contacts, resulting in logic 1 or 0 states, but the open gate is not electrically programmable.

Hui '670, Li et al. '360, and Szluk et al. 340 disclose a semiconductor non-volatile memory device comprising a transistor and a silicide agglomeration fuse in series, but not comprising a silicide agglomeration gate.

Toyoshima '680, Kamiya et al. '200, Kalnitsky et al. '397 and Bohr et al. '700 disclose silicide agglomeration fuse devices, but not in a non-volatile memory cell.

Graham et al. '140 and Redfern et al. '839 disclose a programmable read-only memory array wherein the transistor cells are programmed by being made non-conductive, however the programming method comprising opening the source/drain connection of the transistor with a laser as opposed to electrically opening the gate of the transistor.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven J. Fulk whose telephone number is (571) 272-8323. The examiner can normally be reached on Monday through Friday, 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on (571) 272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sjf
11/17/05



BRADLEY K. SMITH
PRIMARY EXAMINER